

EAST Search History

EAST Search History (Prior Art)

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|--|---|------------------|---------|---------------------|
| L1 | 8128 | (free and (pinned or pinning or fixed or fixing)) adj layer | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/07/14 16:14 |
| L2 | 16 | ("5463516" "5773156" "2002043974" "2002190713" "2001028872" "6353317" "6103406" "2002114974").pn. | US-PGPUB; USPAT; USOCR; DERWENT | OR | ON | 2010/07/14 16:14 |
| L3 | 1 | L2 L1 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/07/14 16:14 |
| L4 | 254 | ((BRUNETTO) near2 (MARTORANA)).INV. ((DANIELE) near2 (PULLINI)).INV. ((PIERO) near2 (PERLO)).INV. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/07/14 16:14 |
| L5 | 9169 | spin?valve or (spin adj valve) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/07/14 16:20 |
| L6 | 8128 | (free and (pinned or pinning or fixed or fixing)) adj layer | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/07/14 16:20 |
| L7 | 4231 | L5 L6 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/07/14 16:20 |
| L8 | 255 | (nano?porous or nanoporous) magnet\$3 tunnel\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2010/07/14 16:20 |

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|-----|---------|--|---|-----|-----|---------------------|
| L9 | 27 | L8((free) same (pin\$3 or fix\$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2010/07/14 16:20 |
| L10 | 418 | ((nano adj (porous or pore)) or nano\$por\$3 or nanopor\$3) magnet \$3 tunnel\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2010/07/14 16:20 |
| L11 | 41 | L10 ((free) same (pin \$3 or fix\$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2010/07/14 16:20 |
| L12 | 14 | L11 not L9 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2010/07/14 16:20 |
| L13 | 9961 | porous adj silicon | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/07/14 16:21 |
| L14 | 2576175 | ferromagnet\$3 or ferro \$magnet\$3 or magnet \$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/07/14 16:21 |
| L15 | 307 | tunnel\$3 L13 L14 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/07/14 16:21 |
| L16 | 9169 | spin?valve or (spin adj valve) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/07/14 16:21 |
| L17 | 8128 | (free and (pinned or pinning or fixed or fixing)) adj layer | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/07/14 16:21 |

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|-----|------|---|---|-----|-----|---------------------|
| L18 | 4231 | L16 L17 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/07/14 16:21 |
| L19 | 857 | tunnel\$3 L13 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/07/14 16:21 |
| L20 | 27 | L8 ((free) same (pin \$3 or fix\$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2010/07/14 16:21 |
| L21 | 6827 | (257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 365/158 257/003 257/004 257/005).ccls. (257/30 360/324.1 365/158).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/07/14 16:21 |
| L22 | 38 | (US-20060102969-\$ or US-20060128038-\$ or US-20060180839-\$ or US-20030179071-\$ or US-20060003185-\$ or US-20060012926-\$ or US-20060093862-\$ or US-20060098354-\$ or US-20060221510-\$ or US-20060255383-\$). did. (US-20040041183- \$ or US-20060255383- \$ or US-20060098354- \$ or US-20060093862- \$ or US-20060012926- \$ or US-20060102969- \$ or US-20060221510- \$ or US-20060128038- \$ or US-20060003185- \$ or US-20030179071- \$ or US-20060180839- \$ or US-20040136232- \$).did. or (US-6097625- \$ or US-6841395-\$ or US-684(US-5565695-\$ or US-5432373-\$ or US- 6297987-\$ or US- 5515314-\$ or US- | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/07/14 16:21 |

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|-----|------|--|---|-----|-----|---------------------|
| | | 5652445-\$)". did.5038-"\$).did. | | | | |
| L23 | 24 | (US-20060102969-\$ or US-20060128038-\$ or US-20060180839-\$ or US-20030179071-\$ or US-20060003185-\$ or US-20060012926-\$ or US-20060093862-\$ or US-20060098354-\$ or US-20060221510-\$ or US-20060255383-\$). did. (US-20040041183- \$ or US-20060255383- \$ or US-20060098354- \$ or US-20060093862- \$ or US-20060012926- \$ or US-20060102969- \$ or US-20060221510- \$ or US-20060128038- \$ or US-20060003185- \$ or US-20030179071- \$ or US-20060180839- \$ or US-20040136232- \$).did. or (US-6097625- \$ or US-6841395-\$ or US-684(US-5565695-\$ or US-5432373-\$ or US- 6297987-\$ or US- 5515314-\$ or US- 5652445-\$)". did.5038-"\$).did. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/07/14 16:21 |
| L24 | 9682 | (257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 438/3 365/158 257/003 257/004 257/005).ccls. (257/30 360/324.1 365/158). CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/07/14 16:21 |
| L25 | 3 | nano?porous same tunnel\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2010/07/14 16:21 |
| L26 | 365 | nanoporous and tunnel \$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2010/07/14 16:21 |

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|----|----|---|--|-----|----|------------------|
| S1 | 24 | (US-20060102969-\$ or US-20060128038-\$ or US-20060180839-\$ or US-20030179071-\$ or US-20060003185-\$ or US-20060012926-\$ or US-20060093862-\$ or US-20060098354-\$ or US-20060221510-\$ or US-20060255383-\$). did. (US-20040041183-\$ or US-20060255383-\$ or US-20060098354-\$ or US-20060093862-\$ or US-20060012926-\$ or US-20060102969-\$ or US-20060221510-\$ or US-20060128038-\$ or US-20060003185-\$ or US-20030179071-\$ or US-20060180839-\$ or US-20040136232-\$). did. or (US-6097625-\$ or US-6841395-\$ or US-684(US-5565695-\$ or US-5432373-\$ or US-6297987-\$ or US-5515314-\$ or US-5652445-\$)". did. 5038-\$). did. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/02/04 11:10 |
| S2 | 38 | (US-20060102969-\$ or US-20060128038-\$ or US-20060180839-\$ or US-20030179071-\$ or US-20060003185-\$ or US-20060012926-\$ or US-20060093862-\$ or US-20060098354-\$ or US-20060221510-\$ or US-20060255383-\$). did. (US-20040041183-\$ or US-20060255383-\$ or US-20060098354-\$ or US-20060093862-\$ or US-20060012926-\$ or US-20060102969-\$ or US-20060221510-\$ or US-20060128038-\$ or US-20060003185-\$ or US-20030179071-\$ or US-20060180839-\$ or US-20040136232-\$). did. or (US-6097625-\$ or US-6841395-\$ or US-684(US-5565695-\$ or US-5432373-\$ or US- | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/02/04 11:10 |

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|-----|---------|--|---|-----|----|---------------------|
| | | 6297987-\$ or US-5515314-\$ or US-5652445-\$)". did.5038-"\$).did. | | | | |
| S3 | 11343 | antiferromagnet\$3 or antiferro\$magnet\$3 or anti\$ferromagnet\$3 or (anti adj ferro\$magnet \$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/02/04 11:10 |
| S4 | 2153752 | ferromagnet\$3 or ferro \$magnet\$3 or magnet \$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/02/04 11:10 |
| S6 | 5542 | (257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 365/158 257/003 257/004 257/005).ccls. (257/30 360/324.1 365/158).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/05/23 13:31 |
| S8 | 8120 | (257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 438/3 365/158 257/003 257/004 257/005).ccls. (257/30 360/324.1 365/158). CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/08/25 14:51 |
| S9 | 2 | "US 20060216836" | US-PGPUB; USPAT; USOCR; DERWENT | AND | ON | 2008/08/25 14:51 |
| S10 | 241 | ((BRUNETTO) near2 (MARTORANA)).INV. ((DANIELE) near2 (PULLINI)).INV. ((PIERO) near2 (PERLO)).INV. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/08/25 14:52 |
| S11 | 16 | ("5463516" "5773156" "2002043974" "2002190713" "2001028872" "6353317" "6103406" "2002114974").pn. | US-PGPUB; USPAT; USOCR; DERWENT | OR | ON | 2008/08/25 16:07 |
| S12 | 7921 | spin?valve or (spin adj valve) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/08/25 16:11 |

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|-----|------|---|---|-----|----|---------------------|
| S13 | 6212 | (free and (pinned or pinning or fixed or fixing)) adj layer | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/08/25 16:11 |
| S14 | 3456 | S12 S13 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/08/25 16:12 |
| S15 | 7923 | spin?valve or (spin adj valve) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/08/26 13:48 |
| S16 | 6216 | (free and (pinned or pinning or fixed or fixing)) adj layer | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/08/26 13:48 |
| S17 | 3458 | S15 S16 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/08/26 13:48 |
| S18 | 16 | ("5463516" "5773156" "2002043974" "2002190713" "2001028872" "6353317" "6103406" "2002114974").pn. | US-PGPUB; USPAT; USOCR; DERWENT | OR | ON | 2008/08/26 13:48 |
| S19 | 241 | ((BRUNETTO) near2 (MARTORANA)).INV. ((DANIELE) near2 (PULLINI)).INV. ((PIERO) near2 (PERLO)).INV. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/08/26 13:48 |
| S20 | 0 | (nanoparticle nano? particle (nano adj particle) nanowire nano?wire (nano adj wire) nanotubes nano? tube (nano adj tube)) and S17 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/08/26 13:50 |
| S21 | 64 | (nanoparticle nano? particle (nano adj particle) nanowire nano?wire (nano adj wire) nanotubes nano? tube (nano adj tube)) and S17 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/08/26 13:50 |

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|-----|----|---|---|-----|----|---------------------|
| S22 | 1 | S18 S16 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/08/26 17:01 |
| S23 | 24 | (US-20060102969-\$ or US-20060128038-\$ or US-20060180839-\$ or US-20030179071-\$ or US-20060003185-\$ or US-20060012926-\$ or US-20060093862-\$ or US-20060098354-\$ or US-20060221510-\$ or US-20060255383-\$). did. (US-20040041183- \$ or US-20060255383- \$ or US-20060098354- \$ or US-20060093862- \$ or US-20060012926- \$ or US-20060102969- \$ or US-20060221510- \$ or US-20060128038- \$ or US-20060003185- \$ or US-20030179071- \$ or US-20060180839- \$ or US-20040136232- \$).did. or (US-6097625- \$ or US-6841395-\$ or US-684(US-5565695-\$ or US-5432373-\$ or US- 6297987-\$ or US- 5515314-\$ or US- 5652445-\$)". did.5038-\$).did. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2009/03/25 18:39 |
| S24 | 38 | (US-20060102969-\$ or US-20060128038-\$ or US-20060180839-\$ or US-20030179071-\$ or US-20060003185-\$ or US-20060012926-\$ or US-20060093862-\$ or US-20060098354-\$ or US-20060221510-\$ or US-20060255383-\$). did. (US-20040041183- \$ or US-20060255383- \$ or US-20060098354- \$ or US-20060093862- \$ or US-20060012926- \$ or US-20060102969- \$ or US-20060221510- \$ or US-20060128038- \$ or US-20060003185- | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/03/25 18:39 |

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|-----|---------|--|--|-----|----|------------------|
| | | \$ or US-20030179071-\$ or US-20060180839-\$ or US-20040136232-\$.did. or (US-6097625-\$ or US-6841395-\$ or US-684(US-5565695-\$ or US-5432373-\$ or US-6297987-\$ or US-5515314-\$ or US-5652445-\$)".did.5038-"\$).did. | | | | |
| S25 | 13165 | antiferromagnet\$3 or antiferro\$magnet\$3 or anti\$ferromagnet\$3 or (anti adj ferro\$magnet \$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/03/25 18:39 |
| S26 | 2343469 | ferromagnet\$3 or ferro \$magnet\$3 or magnet \$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/03/25 18:39 |
| S27 | 6034 | (257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 365/158 257/003 257/004 257/005).ccls. (257/30 360/324.1 365/158).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/03/25 18:39 |
| S28 | 8603 | (257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 438/3 365/158 257/003 257/004 257/005).ccls. (257/30 360/324.1 365/158). CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/03/25 18:39 |
| S29 | 2 | "US 20060216836" | US-PGPUB; USPAT; USOCR; DERWENT | AND | ON | 2009/03/25 18:39 |
| S30 | 249 | ((BRUNETTO) near2 (MARTORANA)).INV. ((DANIELE) near2 (PULLINI)).INV. ((PIERO) near2 (PERLO)).INV. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/03/25 18:39 |

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|-----|------|--|---|-----|----|---------------------|
| S31 | 16 | ("5463516" "5773156" "2002043974" "2002190713" "2001028872" "6353317" "6103406" "2002114974").pn. | US-PGPUB; USPAT; USOCR; DERWENT | OR | ON | 2009/03/25 18:39 |
| S32 | 8317 | spin?valve or (spin adj valve) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/03/25 18:39 |
| S33 | 6822 | (free and (pinned or pinning or fixed or fixing)) adj layer | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/03/25 18:39 |
| S34 | 3717 | S32 S33 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2009/03/25 18:39 |
| S35 | 8317 | spin?valve or (spin adj valve) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/03/25 18:39 |
| S36 | 6822 | (free and (pinned or pinning or fixed or fixing)) adj layer | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/03/25 18:39 |
| S37 | 3717 | S35 S36 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2009/03/25 18:39 |
| S38 | 16 | ("5463516" "5773156" "2002043974" "2002190713" "2001028872" "6353317" "6103406" "2002114974").pn. | US-PGPUB; USPAT; USOCR; DERWENT | OR | ON | 2009/03/25 18:39 |
| S39 | 249 | ((BRUNETTO) near2 (MARTORANA)).INV. ((DANIELE) near2 (PULLINI)).INV. ((PIERO) near2 (PERLO)).INV. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/03/25 18:39 |

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| S40 | 0 | (nanoparticle nano? particle (nano adj particle) nanowire nano?wire (nano adj wire) nanotubes nano? tube (nano adj tube)) and S37 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2009/03/25 18:39 |
| S41 | 76 | (nanoparticle nano? particle (nano adj particle) nanowire nano?wire (nano adj wire) nanotubes nano? tube (nano adj tube)) and S37 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2009/03/25 18:39 |
| S42 | 1 | S38 S36 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2009/03/25 18:39 |
| S43 | 1 | (US-20060216836-\$). did. | US-PGPUB | AND | ON | 2009/03/25 19:49 |
| S44 | 1 | S43 spacer "113" "133" | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2009/03/25 19:50 |
| S45 | 284 | nanoporous and tunnel \$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2009/09/08 16:28 |
| S46 | 26 | nanoporous same tunnel\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2009/09/08 16:28 |
| S47 | 3 | nano?porous same tunnel\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2009/09/08 16:31 |
| S48 | 191 | (nano?porous or nanoporous) magnet\$3 tunnel\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2009/09/08 16:31 |

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| S50 | 118 | S48 (free) and (pin\$3 or fix\$3) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2009/09/08 16:32 |
| S51 | 6 | S48((free) same (pin\$3 or fix\$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2009/09/08 16:32 |
| S52 | 6 | S48 ((free) same (pin\$3 or fix\$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2009/09/08 16:32 |
| S53 | 327 | ((nano adj (porous or pore)) or nano\$por\$3 or nanopor\$3) magnet\$3 tunnel\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2009/09/08 16:34 |
| S54 | 19 | S53 ((free) same (pin\$3 or fix\$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2009/09/08 16:34 |
| S55 | 13 | S54 not S51 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2009/09/08 16:34 |
| S57 | 327 | ((nano adj (porous or pore)) or nano\$por\$3 or nanopor\$3) magnet\$3 tunnel\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2009/09/08 16:35 |
| S60 | 5119 | (porous or pore) magnet\$3 tunnel\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2009/09/08 16:36 |

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|-----|------|--|---|-----|----|---------------------|
| S61 | 1363 | S60 ((free) same (pin \$3 or fix\$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2009/09/08 16:36 |
| S62 | 19 | S57 ((free) same (pin \$3 or fix\$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2009/09/08 16:36 |
| S63 | 4 | (porous or pore) (magnet\$3 same tunnel \$3) S62 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2009/09/08 16:37 |
| S65 | 28 | magnet\$3 ((porous or pore) same tunnel\$3) S61 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2009/09/08 16:37 |
| S66 | 118 | (porous or pore) (magnet\$3 same tunnel \$3) S61 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2009/09/08 16:37 |
| S67 | 253 | ((BRUNETTO) near2 (MARTORANA)).INV. ((DANIELE) near2 (PULLINI)).INV. ((PIERO) near2 (PERLO)).INV. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/03/24 18:28 |
| S68 | 16 | ("5463516" "5773156" "2002043974" "2002190713" "2001028872" "6353317" "6103406" "2002114974").pn. | US-PGPUB; USPAT; USOCR; DERWENT | OR | ON | 2010/03/24 18:28 |
| S69 | 8965 | spin?valve or (spin adj valve) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/03/24 18:28 |
| S70 | 7771 | (free and (pinned or pinning or fixed or fixing)) adj layer | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/03/24 18:28 |

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| S71 | 4097 | S69 S70 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/03/24 18:28 |
| S72 | 8965 | spin?valve or (spin adj valve) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/03/24 18:28 |
| S73 | 7771 | (free and (pinned or pinning or fixed or fixing)) adj layer | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/03/24 18:28 |
| S74 | 4097 | S72 S73 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/03/24 18:28 |
| S75 | 9382 | (257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 438/3 365/158 257/003 257/004 257/005).ccls. (257/30 360/324.1 365/158). CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/03/24 18:28 |
| S76 | 5475 | (porous or pore) magnet\$3 tunnel\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/03/24 18:29 |
| S77 | 1428 | S76 ((free) same (pin \$3 or fix\$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/03/24 18:29 |
| S78 | 29 | magnet\$3 ((porous or pore) same tunnel\$3) S77 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/03/24 18:29 |

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| S79 | 29 | magnet\$3 ((porous or pore) same tunnel\$3) S77 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/03/24 18:29 |
| S80 | 217 | (nano?porous or nanoporous) magnet\$3 tunnel\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2010/03/24 18:29 |
| S81 | 13 | S80((free) same (pin \$3 or fix\$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2010/03/24 18:29 |
| S82 | 370 | ((nano adj (porous or pore)) or nano\$por\$3 or nanopor\$3) magnet \$3 tunnel\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2010/03/24 18:29 |
| S83 | 26 | S82 ((free) same (pin \$3 or fix\$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2010/03/24 18:29 |
| S84 | 13 | S83 not S81 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2010/03/24 18:29 |
| S85 | 34687 | (porous or pore) with silicon | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/03/24 18:30 |
| S86 | 9970 | (porous or pore) adj silicon | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/03/24 18:30 |

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| S87 | 9691 | porous adj silicon | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/03/24 18:30 |
| S88 | 821 | tunnel\$3 S87 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/03/24 18:30 |
| S89 | 2516254 | ferromagnet\$3 or ferro \$magnet\$3 or magnet \$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2010/03/24 18:31 |
| S90 | 289 | tunnel\$3 S87 S89 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2010/03/24 18:31 |
| S91 | 3 | ((nano?porous or nanoporous) adj silicon) magnet\$3 tunnel\$3 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | OFF | 2010/03/24 18:32 |

EAST Search History (Interference)

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|--|--------------------------|------------------|---------|------------------|
| L27 | 6342 | (free and (pinned or pinning or fixed or fixing)) adj layer | US-PGPUB; USPAT; UPAD | OR | ON | 2010/07/14 16:42 |
| L28 | 416 | ((nano adj (porous or pore)) or nano\$por\$3 or nanopor\$3) magnet\$3 tunnel\$3 | US-PGPUB; USPAT; UPAD | AND | OFF | 2010/07/14 16:42 |
| L29 | 7253 | spin?valve or (spin adj valve) | US-PGPUB; USPAT; UPAD | OR | ON | 2010/07/14 16:42 |
| L30 | 6342 | (free and (pinned or pinning or fixed or fixing)) adj layer | US-PGPUB; USPAT; UPAD | AND | ON | 2010/07/14 16:43 |
| L31 | 7253 | spin?valve or (spin adj valve) | US-PGPUB; USPAT; UPAD | AND | ON | 2010/07/14 16:43 |

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|-----|------|--|-----------------------|-----|----|------------------|
| L32 | 0 | (free ((pinned or pinning or fixed or fixing) adj layer) (spin?valve or (spin adj valve)) ((nano adj (porous or pore)) or nano\$por\$3 or nanopor\$3) magnet \$3 tunnel\$3).clm. | US-PGPUB; USPAT; UPAD | AND | ON | 2010/07/14 16:46 |
| L33 | 9025 | (257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 438/3 365/158 257/003 257/004 257/005).ccds. (257/30 360/324.1 365/158).CCLS. | US-PGPUB; USPAT; UPAD | OR | ON | 2010/07/14 16:46 |
| L34 | 0 | (free ((pinned or pinning or fixed or fixing) layer) (spin? valve or (spin adj valve)) ((nano adj (porous or pore)) or nano\$por\$3 or nanopor\$3) magnet \$3 tunnel\$3).clm. | US-PGPUB; USPAT; UPAD | AND | ON | 2010/07/14 16:47 |

7/ 14/ 2010 4:47:31 PM

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